NATURAL SCIENCE LABORATORY ASSISTANTS SERIES

		Occ.	Work	Prob.	Effective
Code No.	Class Title	Area	Area	Period	Date
0266	Natural Science Laboratory Assistant I	15	502	6 mo.	09/30/87
0267	Natural Science Laboratory Assistant II	14	502	6 mo.	09/30/87
0268	Natural Science Laboratory Assistant III	14	502	6 mo.	09/30/87

Promotional Line: 20

Series Narrative

Employees in this series perform laboratory support duties in the natural sciences, ranging from those of a manual or mechanical nature to technical duties that involve the application of more intricate and complex methods and techniques and a practical understanding of scientific techniques.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Natural Science Laboratory Assistant I

Employees at this level perform a limited variety of simple and routine laboratory tasks predominantly of a manual or mechanical nature. They work under direct supervision from higher-level Natural Science Laboratory Assistants, academic personnel, or other designated staff member(s).

0266

A Natural Science Laboratory Assistant I typically –

- 1. performs a limited variety of the most routine laboratory tasks, with specific instructions as to working details and without deviation from established procedures
- 2. prepares simple stock solutions and reagents
- 3. performs the most routine staining and fixing of histological specimens
- 4. places media in test tubes, petri dishes, or other containers
- 5. prepares simple culture media
- 6. feeds prescribed simple maintenance diets to experimental animals in accordance with established procedures and schedules
- 7. restrains animals for inoculation and anesthetization and otherwise handles animals as required
- 8. maintains simple records
- 9. makes rough non-critical measurements

- 10. performs laboratory maintenance duties (such as washing and sterilizing laboratory glassware, apparatus, instruments, utensils, and equipment with cleansing compounds, cleaning animal cages, keeping clean linens in adequate supply, and cleaning laboratory floors) as required
- 11. makes minor repairs
- 12. performs other related duties as assigned

Level II: Natural Science Laboratory Assistant II

0267

Employees at this level perform routine technical duties relative to the work or projects of a natural science laboratory that require a practical understanding of a limited number of scientific techniques. They work under general supervision from higher-level Natural Science Laboratory Assistants, academic personnel, or other designated staff member(s).

A Natural Science Laboratory Assistant II typically –

- performs a normal variety of routine technical tasks that require proficiency and skill in a limited number of methods and techniques, working with general instructions and with allowance for minor deviations from established procedures
- 2. performs standard and repetitive technical procedures (such as staining, evaporating, measuring materials, compounding, centrifuging, titrating, and filtering)
- 3. fixes, decalcifies, dehydrates, embeds, sections, and stains bone materials, using a limited number of techniques
- 4. is responsible for the routine and repetitive conduct of any of the commonly used procedures required to differentiate a few species of bacteria, virus, or fungi through microscopic study of stained materials or through examinations of cultures in differential media
- 5. prepares all types of media, involving weighing of materials, compounding mixtures, titrating, and adjusting reaction to predetermined Ph level by use of simple colorimeter
- 6. prepares diets from written recipes requiring careful weighing and mixing of several different ingredients
- 7. weighs animals, prepares them for experiments, and assists in gross autopsies by preparing instruments and making incisions as directed
- 8. keeps accurate records of data gathered from assays, tests on animals, or other experimentations (such as food intake, physiological reactions, weight changes, loss of appetite, change in skin coloring, languidness, skin lesions, and other gross phenomena)
- 9. performs a variety of technical measurements (such as weighing animals, using analytical balances, spectrophotometers, and colorimeters)
- 10. requisitions, cares for, and maintains laboratory items (such as equipment, supplies, specimens, drawings, charts, slides, and models)

- 11. adjusts, calibrates, replaces broken parts, and generally keeps a variety of laboratory equipment in good repair
- 12. assists in the training and supervision of employees of lower rank
- 13. performs other related duties as assigned

Level III: Natural Science Laboratory Assistant III

0268

Employees at this level perform at a journeymen level of skill work involving the application of the more intricate and complex methods and techniques relative to the work or projects of a natural science laboratory and requiring a practical understanding of scientific techniques. They work under general supervision from academic personnel or other designated staff member(s).

A Natural Science Laboratory Assistant III typically –

- performs with a considerable degree of independence a wide variety of assays and tests involving the application of methods and techniques requiring proficiency and a high degree of manipulative skill in all required methods
- performs difficult and complex technical procedures (such as multistage purification processes and assays) independently within a framework of established methods, requiring only limited responsibility for interpretation of results, and on own initiative carries tasks through to completion without further instructions
- 3. prepares tissues for histological examinations, using a wide variety of techniques, with responsibility for selecting techniques designed to reveal various characteristics
- 4. identifies as to genus or general morphological group any of the organisms fairly common in the types of materials with which a specific project is concerned and carries to the species or strain level the determinations relating to the organisms with which the project is primarily concerned
- 5. performs any of the various operations or procedures relating to the use of eggs as live culture media for the production, perpetuation, or testing of micro-organisms
- 6. selects the necessary number of suitable experimental animals and makes intravenous injections at definite time intervals, with responsibility for maintaining time schedules for varying dosages and ingredients according to animal weight and condition
- 7. performs gross autopsies, identifies and removes internal organs, and is responsible for noting any abnormalities
- 8. records results of tests and experiments and prepares detailed graphs, tables, and reports of procedures, observations, reactions, dosages, and reaction times
- 9. observes and measures by technical means refined phenomena in experiments, with responsibility for notifying supervisor of deviations from projected or expected results

- 10. is responsible for requisitioning, caring for, and maintaining laboratory items (such as equipment, supplies, specimens, drawings, charts, slides, and models) for multiple laboratory areas or in a large laboratory with multiple personnel and functions
- 11. maintains, assembles, adjusts, and repairs complex laboratory equipment and/or is responsible for same
- 12. is responsible for the training and supervision of multiple employees of lower rank
- 13. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

Level I: Natural Science Laboratory Assistant I

0266

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. high school graduation or equivalent

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. manual dexterity

Level II: Natural Science Laboratory Assistant II

0267

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. high school graduation or equivalent
- 2. two years of experience in natural science (such as biology, veterinary medicine, chemistry, physiology, or micro-biology laboratory techniques). University education with major in natural sciences may be substituted, year for year, up to a maximum of two years.

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. manual dexterity

Level III: Natural Science Laboratory Assistant III

0268

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. high school graduation or equivalent
- 2. three years of experience in natural science (such as biology, veterinary medicine, chemistry, physiology, or micro-biology laboratory techniques). University education with major in natural science may be substituted, year for year, up to a maximum of three years

PERSONNEL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. manual dexterity

Natural Science Laboratory Assistant I	Edited
Natural Science Laboratory Assistant II	
Natural Science Laboratory Assistant III	Edited